Frequently Asked Questions: Population-based HIV Impact Assessments
March 2017

OVERVIEW OF SURVEYS

1. What is the Population-based HIV Impact Assessment (PHIA) survey?

The PHIA is a household-based survey used to measure the status of the national HIV response in 13 countries supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). These surveys are led by each country's Ministry of Health with funding from PEPFAR. The surveys are being implemented by ICAP at Columbia University in collaboration with local partners, and with technical assistance from CDC.

2. Why are PHIA surveys being conducted?

UNAIDS has set global targets to control HIV that call for 90 percent of persons living with HIV (PLHIV) to know their status, 90 percent of these people to be on antiretroviral treatment (ART), and 90 percent of those on ART to be virally suppressed – meaning they have very low levels of HIV in their bodies. UNAIDS' models predict that achieving these 90-90-90 targets by 2020 will dramatically slow the spread of HIV and help end the HIV epidemic by 2030.

Since 2000, population-based surveys, predominantly Demographic and Health Surveys (DHS+) and AIDS Indicator Surveys (AIS), have been an important surveillance tool to measure HIV prevalence or the total number of people living with HIV. However, these surveys do not provide direct estimates of viral load – the amount of HIV virus in a person's body – which is necessary to measure treatment success and progress toward the 90-90-90 targets. Nor do most of these surveys directly estimate HIV incidence – the rate of new HIV infections – which helps assess the impact of HIV prevention and treatment programs.

Building on the success of the 2012 Kenya AIDS Indicator Survey – which provided essential data to evaluate the HIV response and inform future policies for treatment and prevention – PHIA surveys directly measure HIV incidence, prevalence and viral load among those living with HIV. Together, these indicators will help to measure progress toward reaching the 90-90-90 targets and also assess the impact of HIV prevention and treatment programs supported by the U.S. government. Conducting these population-based, HIV-focused household surveys is part of the PEPFAR priority to make evidence-based decisions and evaluate program impact. These PHIA data are an important piece of the puzzle that adds critical information to help guide global efforts to combat HIV.

3. What is CDC's role in PHIA?

CDC is playing a key role, providing technical and scientific expertise to country partners in the creation and implementation of the PHIA surveys. Working side by side with Ministries of Health, other government agencies and the implementing partner, ICAP at Columbia University, CDC is lending its expertise in epidemiology, laboratory science, and program services, and providing training to help partners design, implement and evaluate PHIA surveys. CDC developed the LAg-

Avidity EIA – a simple, rapid laboratory test that can simultaneously diagnose HIV and identify if an infection is recent – that was used in the PHIA surveys to directly measure population incidence.

4. What are the selected PHIA countries?

Thirteen PEPFAR-supported countries, mostly in sub-Saharan Africa – the region that is most severely affected by HIV – were selected for PHIA. These countries include: Cameroon, Cote d'Ivoire, Ethiopia, Haiti, Kenya, Lesotho, Malawi, Namibia, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

5. What is the time frame for conducting the surveys in these countries?

Surveys have already been conducted in Malawi, Zambia and Zimbabwe, and preliminary results from these three countries were released on World AIDS Day (December 1, 2016). Preliminary results from Uganda and Swaziland are expected in August 2017, and from Tanzania and Lesotho in October 2017. Preliminary results from the remaining national surveys are anticipated in 2018.

SURVEY METHODS

6. How are people selected to participate in the PHIA surveys?

Households visited by PHIA survey teams are randomly selected. Consenting participants are asked questions about their knowledge about HIV, their testing history, awareness of their HIV status, and use of HIV care and treatment services, and to receive home-based HIV counseling and testing including return of results. Participants have the option not to answer questions about their use of HIV care and treatment services. They can also choose to decline participation in the home-based testing and counseling. Participants can withdraw at any time after starting the survey or participating in testing and counseling.

7. How are the PHIA surveys being conducted?

Basic information is collected about the household from the head of household. Individual participants are asked about self-reported HIV status, exposure to HIV care and prevention services including voluntary medical male circumcision and HIV testing and counseling, and behavioral risk factors. A core group of questions will be used across all country surveys to obtain indicator data. Existing supplementary questions and country developed questions may be added to the questionnaires.

The survey offers home-based HIV testing and counseling to measure HIV prevalence. Blood samples are drawn by a needle for adults and children over two years old, or by a finger/heel stick for children under the age of two. These samples are tested in the home using the standard rapid HIV test protocol that has been established by each country. Blood samples from children under 18 months are tested in the laboratory. All HIV-positive samples are retested with a confirmatory test in

the laboratory. Persons identified as HIV-positive are provided their test results and offered a referral for HIV care and treatment or other relevant services.

All participants who undergo HIV testing receive pre- and post-test counseling, conducted according to national and WHO guidance. Counseling is conducted in a location that ensures participant confidentiality is maintained.

8. What happens to the HIV test results once the survey is completed?

Only participants who opt to get tested and receive their results are included in the estimates of HIV prevalence, incidence, and viral load suppression. Their HIV and CD4 test results are returned to them through home-based testing and counseling programs. Some countries have included non-HIV tests, such as syphilis and Hepatitis B. Viral load testing is conducted in a central laboratory and these results are sent to the clinic specified by the participant.

9. How are HIV-positive participants linked to treatment?

All HIV-positive participants are provided a referral form which they could use to seek care at a health facility of their choice. Viral load test results are returned to their chosen health facility within approximately 6 to 8 weeks. When viral load results are available to be sent to clinics, the participants receive a reminder text message or phone call. HIV infected children and newly diagnosed adolescent and adult participants may receive enhanced or active referral. In some PHIA surveys, participants are contacted by a PHIA team member who helps them enroll in care at their chosen health facility, unless they prefer not to be contacted.

SURVEY IMPACT ON PUBLIC HEALTH

10. How will PHIA results improve our understanding of HIV epidemics?

The PHIA directly measures national HIV incidence and viral load suppression, and collects information about people's use of HIV care and treatment services. These enhancements over traditional surveys make PHIAs the most comprehensive and accurate evaluations to date of the state of the HIV epidemic in severely affected sub-Saharan African countries and Haiti. The methods developed for the PHIA surveys can be a model for other countries that are conducting their own HIV-focused household surveys.

11. How will PHIA affect HIV programs on the ground?

The PHIA survey results will help shape programs and policies to combat the HIV epidemic, and can also help inform global funding priorities. Survey data will provide a measure of access to and impact of HIV prevention and treatment services and provide data for global health and development indicators. Because the PHIA surveys include HIV data by age, gender, and location, program planners and donors will be able to maximize impact by making smarter investments to reach the

right people in the right places. Additional laboratory testing will help assess transmitted and acquired drug resistance. This information is very important as we further expand treatment of HIV-positive persons in affected countries.

12. How do PHIA results compare to previous estimates of HIV prevalence and incidence?

The PHIA results validate what we've only been able to previously predict in models – that our global HIV efforts are accelerating country progress toward achieving epidemic control. HIV prevalence results are similar to 2015 UNAIDS HIV prevalence estimates for Malawi, Zambia, and Zimbabwe, and HIV incidence is similar for two of the initial three countries surveyed. Preliminary data from Demographic and Health Surveys conducted in Zimbabwe and Malawi in 2015 to 2016 show comparable adult HIV prevalence results to the Zimbabwe PHIA (14.1 percent vs. 14.0 percent) and slightly lower HIV prevalence to the Malawi PHIA (8.8 percent vs. 10.0 percent), respectively.

AVAILABILITY OF SURVEY RESULTS

13. When will PHIA survey results be available to the public?

Summary sheets from the first three countries to conduct PHIA surveys - Zimbabwe (ZIMPHIA), Malawi (MPHIA), and Zambia (ZAMPHIA) - are available online at http://phia.icap.columbia.edu. Preliminary national reports contain around 25 key tables and descriptive text, and will be released approximately four months after data collection ends in each country. Detailed final reports will be made available approximately eight months after the preliminary report is released. Datasets for use by public health professionals will be released along with the final PHIA report, and will be available in multiple statistical formats, including SAS and Stata.